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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/696,947	10/27/2000	Kiichiro Sakashita	198801US3	6701

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EXAMINER

KEITH, JACK W

ART UNIT

PAPER NUMBER

3641

DATE MAILED: 03/25/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

sk

<b>Office Action Summary</b>	Application No. <b>09/696,947</b>	Applicant(s) <b>Sakashita et al</b>
	Examiner <b>Jack K Ith</b>	Art Unit <b>3641</b>
<i>-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --</i>		
<b>Period for Reply</b>		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>1</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.		
<ul style="list-style-type: none"> <li>- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.</li> <li>- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.</li> <li>- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.</li> <li>- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).</li> <li>- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).</li> </ul>		
<b>Status</b>		
1) <input checked="" type="checkbox"/> Responsive to communication(s) filed on <u>Oct 27, 2000</u>		
2a) <input type="checkbox"/> This action is FINAL.      2b) <input checked="" type="checkbox"/> This action is non-final.		
3) <input type="checkbox"/> Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> 35 C.D. 11; 453 O.G. 213.		
<b>Disposition of Claims</b>		
4) <input checked="" type="checkbox"/> Claim(s) <u>1-12</u> is/are pending in the application.		
4a) Of the above, claim(s) _____ is/are withdrawn from consideration.		
5) <input type="checkbox"/> Claim(s) _____ is/are allowed.		
6) <input type="checkbox"/> Claim(s) _____ is/are rejected.		
7) <input type="checkbox"/> Claim(s) _____ is/are objected to.		
8) <input checked="" type="checkbox"/> Claims <u>1-12</u> are subject to restriction and/or election requirement.		
<b>Application Papers</b>		
9) <input type="checkbox"/> The specification is objected to by the Examiner.		
10) <input type="checkbox"/> The drawing(s) filed on _____ is/are objected to by the Examiner.		
11) <input type="checkbox"/> The proposed drawing correction filed on _____ is: a) <input type="checkbox"/> approved b) <input type="checkbox"/> disapproved.		
12) <input type="checkbox"/> The oath or declaration is objected to by the Examiner.		
<b>Priority under 35 U.S.C. § 119</b>		
13) <input type="checkbox"/> Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).		
a) <input type="checkbox"/> All b) <input type="checkbox"/> Some* c) <input type="checkbox"/> None of:		
1. <input type="checkbox"/> Certified copies of the priority documents have been received.		
2. <input type="checkbox"/> Certified copies of the priority documents have been received in Application No. _____.		
3. <input type="checkbox"/> Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).		
*See the attached detailed Office action for a list of the certified copies not received.		
14) <input type="checkbox"/> Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).		
<b>Attachment(s)</b>		
15) <input type="checkbox"/> Notice of References Cited (PTO-892)		
16) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)		
17) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____		
18) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____		
19) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)		
20) <input type="checkbox"/> Other: _____		

## **DETAILED ACTION**

### *Election/Restriction*

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I Claims 1-4, drawn to an apparatus (absorber rod), classified in class 376, subclass 219.
  - II. Claims 5-8, drawn to an apparatus (storage cask), classified in class 376, subclass 272.
  - III. Claims 9 and 10, drawn to an apparatus (insertion apparatus), classified in class 376, subclass 268.
  - IV. Claims 11 and 12, drawn to a process (method of storing and conveying spent assemblies), classified in class 376, subclass 260.
2. The inventions are distinct, each from the other because of the following reasons:

Inventions II and I are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the details of the subcombination as separately claimed are not set forth in the

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combination. The subcombination has separate utility such as a control rod for an operating PWR or BWR.

3. Inventions I/II and III are related as product and apparatus for its use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the apparatus for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different apparatus for using that product (MPEP § 806.05(h)). In the instant case, the apparatus for using the product as claimed can be practiced with another materially different product such as conventional spent fuel storage casks.

4. Inventions IV and I/II/III are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case, the process as claimed can be practiced by another materially different apparatus such as conventional refueling apparatus using a wet or dry transfer process.

5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

6. Upon election of invention I, II, III, IV or IV, the applicant is further required under 35 U.S.C. 121 to elect one of the following disclosed species for prosecution on the merits to which

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the claims shall be restricted if no generic claim is finally held to be allowable (currently, no claims appear to be generic):

A Embodiment wherein the reactor is a PWR.

B. Embodiment wherein the reactor is a BWR.

7. Upon election of invention A or B, the applicant is further required under 35 U.S.C. 121 to elect one of the following disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable (currently, no claims appear to be generic):

a. The embodiment wherein the absorber rod is aluminum composite material.

b. The embodiment wherein the absorber rod is aluminum alloy formed by adding boron powder equivalent to aluminum composite material.

c. The embodiment wherein the absorber rod is aluminum alloy formed by adding boron powder equivalent to aluminum alloy.

d. The embodiment wherein the absorber rod is aluminum alloy formed by adding boron compound equivalent to aluminum composite material.

e. The embodiment wherein the absorber rod is aluminum alloy formed by adding boron compound equivalent to aluminum alloy.

8. Upon election of invention I, A or B and one of a-e above, the applicant is further required under 35 U.S.C. 121 to elect one of the following disclosed species for prosecution on

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the merits to which the claims shall be restricted if no generic claim is finally held to be allowable (currently, no claims appear to be generic):

1. The embodiment wherein the fixing member for the absorbing rod corresponds to only the control guide pipe of a spent fuel assembly for a PWR.

ii. The embodiment wherein the fixing member fro the absorbing rod corresponds to the sectional position of the control guide pipe including a measuring pipe.

9. Upon election of invention III, A or B and one of a-e above, the applicant is further required under 35 U.S.C. 121 to elect one of the following disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable (currently, no claims appear to be generic):

(1) The embodiment wherein the cask thickness corresponds to the neutron absorbing capability of the plates composing the basket.

(2) The embodiment wherein the cask thickness corresponds to the neutron absorbing capability of the square pipes composing the basket.

(3) The embodiment wherein the cask thickness corresponds to the neutron moderating capability of the plates composing the basket.

(4) The embodiment wherein the cask thickness corresponds to the neutron moderating capability of the square pipes composing the basket.

10. Upon election of invention III, A or B, one of a-e and one of (1)-(4) above, the applicant is further required under 35 U.S.C. 121 to elect one of the following disclosed species for

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prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable (currently, no claims appear to be generic):

AA. The embodiment wherein the portion corresponding to the sectional area of the absorbing rod inserted in the spent fuel assembly is reduced for the portion of the equivalent sectional area corresponding to the neutron absorbing capability of the absorbing rod inserted in the spent fuel assembly.

BB. The embodiment wherein the portion corresponding to the sectional area of the absorbing rod inserted in the spent fuel assembly is reduced for the portion of the equivalent sectional area corresponding to the neutron moderating capability of the absorbing rod inserted in the spent fuel assembly.

11. Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement (e.g., III, A, a, (1) and AA), listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species.

MPEP § 809.02(a).

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Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

12. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

13. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jack Keith whose telephone number is (703) 306-5752. The examiner can normally be reached on Monday through Friday from 7:00 to 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone, can be reached on (703) 306-4198. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-7687.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

jwk

March 20, 2002

MICHAEL J. CARONE  
SUPERVISORY PATENT EXAMINER